AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A fastener system for fastening a vacuum pump (1) to a wall (2) of a stationary structure (3) having tapped holes (15) provided in the wall (2) of the stationary structure (3), said fastener system comprising:

~~a coaxial~~an annular flange (14) configured to be provided on a body of the vacuum pump and around a suction orifice ~~(6),~~(6) such that the flange (14) is coaxial with respect to a center axis of the suction orifice (6);

through holes (16) provided in the ~~coaxial~~ annular flange (14); and

screws (17) having heads (18), wherein the screws are fitted so that their shanks (19) pass through the through holes (16) and are to be screwed into corresponding ones of the tapped holes (15) in order to secure the vacuum pump (1) to the stationary structure (3) while pressing the flange (14) against the wall (2) of the stationary structure (3); and

wherein each through hole (16) comprises a distal segment (16a) that is cylindrical followed by an enlarged proximal segment (16b) that is cylindrical about the same axis and wherein said shank passes through said distal segment first, and then passes through said proximal segment~~proximal segment (16b) is configured to be provided adjacent to the corresponding tapped hole of the stationary structure~~, so that when fastened to the wall of the stationary structure, in the event of shear forces (20, 21) being applied in any lateral direction in a connection zone between the vacuum pump (1) and the stationary structure (3), the shank (19)

of the screw ~~is allowed to bend~~bends and the through hole (16) is ~~allowed to be~~ offset laterally (D) ~~correspondingly relative to the associated corresponding tapped hole (15)~~.

2. (previously presented): A system according to claim 1, wherein the proximal segment (16b) of the through hole (16) allows a maximum lateral offset (D) between the through hole (16) and the corresponding tapped hole that is greater than the radius of the screw shank (19), such that during bending of the screw shank (19), the screw shank comes into abutment against the side wall (16c) of the proximal segment (16b) of the through hole (16); and

the proximal segment (16b) of the through hole (16) is of a length (Lb) greater than the length (La) of the distal segment (16a) of the through hole (16).

3. (previously presented): A system according to claim 1, characterized in that the proximal segment (16b) of the through hole (16) includes a cylindrical proximal portion (116b) that is connected to the distal segment (16a) of the through hole (16) by a circularly frustoconical distal portion (216b).

4. (original): A system according to claim 3, characterized in that the frustoconical distal portion (216b) has a cone half-angle equal to about 60°.

5. (previously presented): A system according to claim 1, characterized in that the screw shank (19) comprises, adjacent to the head (18), a smooth shank segment (19a) of

diameter (Dt) that is considerably smaller than the diameter (Da) of the distal segment (16a) of the through hole (16), and that is followed to a free end (19c) by a threaded segment (19b) shaped to screw into the associated tapped hole (15) in the wall (2).

6. (original): A system according to claim 5, characterized in that the diameter (Dt) of the smooth shank segment (19a) is less than or equal to 80% of the diameter (Da) of the distal segment (16a) of the through hole (16).

7. (previously presented): A system according to claim 5, characterized in that the proximal segment (16b) of the through hole (16) is of a length (Lb) greater than or equal to 1.5 times the length (La) of the distal segment (16a) of the through hole (16).

8. (previously presented): A system according to claim 1, characterized in that a washer (22) is interposed between the head (18) of the screw (17) and an adjacent outside face (14a) of the flange (14).

9. (previously presented): A system according to claim 1, characterized in that an elastomer damper material is inserted in the space between the shank (19) of the screw and the corresponding through hole (16) of the flange (14).

10. (withdrawn): A vacuum pump (1), comprising:

a pump body in which a rotor is rotatable;

an annular flange provided on the pump body and configure to be placed around a suction orifice of a corresponding stationary structure;

through holes in the annular flange; and

screws having heads fitted so that their shanks can pass through respective ones of the through holes and screwed into the stationary structure; and

wherein each through hole comprises a distal segment that is cylindrical followed by an enlarged proximal segment that is cylindrical about the same axis, the enlarged proximal segment positioned to be adjacent to the stationary structure for fastening the vacuum pump to the stationary structure.

11. (currently amended): A fastener system for fastening a vacuum pump, the fastener system comprising:

a screw comprising a head and a shank;

an annular flange comprising a through hole, wherein the through hole comprises a distal segment and a proximal segment; and

a stationary structure having a hole for receiving the screw; and

wherein a cross-sectional area of the distal segment taken in a direction perpendicular to a central axis of the through hole is smaller than a cross-sectional area of the proximal segment taken in a direction perpendicular to a central axis of the through hole, and such that, when the screw is inserted into the through hole with the proximal segment closest to the stationary

structure relative to the distal segment and secured to the stationary structure, the proximal segment provides a gap in which the shank ~~can bend~~bends without breaking while maintaining the vacuum pump fastened to the stationary structure; and

wherein the proximal segment has an opening abutting the hole in the stationary structure that is sized differently from a portion of the hole in the stationary structure that abuts the opening in the proximal segment.

12. (previously presented): The fastener system according to claim 11, wherein the proximal segment has an opening that is larger than the hole in the stationary structure.

13. (previously presented): The fastener system according to claim 11, wherein a distance measured in a radial direction of the through hole between an inside wall of the proximal segment and an opposing outside surface of the screw shank when the screw is fully inserted in the through hole is greater than a radius of the screw shank.

14. (previously presented): The fastener system according to claim 11, wherein the proximal segment of the through hole is of a length greater than a total length of the distal segment of the through hole.

15. (previously presented): The fastener system according to claim 11, wherein the shank comprises, adjacent to the head, a smooth shank segment of a diameter that is substantially

smaller than a diameter of the distal segment of the through hole, and that is followed to a free end by a threaded segment shaped to screw into the hole in the stationary structure.

16. (previously presented): The fastener system according to claim 15, wherein the diameter of the smooth shank segment is less than or equal to 80% of the diameter of the distal segment of the through hole.

17. (previously presented): The fastener system according to claim 15, wherein the proximal segment is of a length greater than or equal to 1.5 times a length of the distal segment.

18. (previously presented): The system according to claim 1, wherein each proximal segment has an opening that is greater than an outermost opening of the corresponding tapped hole.